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(54) Title: METHOD FOR THE CO-GENERATION OF HEAT AND POWER IN CONJUNCTION WITH HIGH TEMPERATURE HEAT NEEDS

(57) Abstract: Method of Cogeneration of Heat and Power where Electricity Generating Device(s) - EGD-exhaust gases are used as oxidiser in high temperature heat needs. This invention concerns a new method of applying cogeneration of heat and power in cases where generation of high temperature-up to 1500 °C or more - heat is needed locally in multiple positions. This method is characterised by the use of the EGD - Electricity Generating Device- exhaust gases -e.g. the exhaust gases of a turbine set -as oxidiser for the combustion of additional fuel in the kilns and the furnaces of high temperature industries -e.g. ceramics, heavy clay, glass, steel/metal, cement industry etc.- after exhaust gases have been increased their temperature in a heat exchanging process by cooling the processed material or the exhaust gases produced in the kiln or the furnace, eliminating the air which is usually used as oxidiser medium. It is additionally characterised by the ability to enrich EGD exhaust gases with a mixture of air and/or oxygen of various temperature levels and/or compositions before used as oxidiser. It is applicable in the above mentioned industries and other industry and applications where relatively high temperatures are needed.